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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,885	10/21/2003	Jian-Shen Yu	E0523-00018	3886
8933	7590	07/21/2004	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT ONE LIBERTY PLACE PHILADELPHIA, PA 19103-7396			WAMBACH, MARGARET R	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/689,885

Applicant(s)

YU, JIAN-SHEN

Examiner

Margaret R Wambach

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/21/03</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: From a reading of the disclosure taken as a whole, it appears as if the specification inaccurately refers to "shift registers" in the summary, for example, when only individual stages are being referenced. All such references should be corrected.

Appropriate correction is required.

### ***Claim Objections***

Claims 1 and 13 are objected to because of the following informalities: In claim 1 line 11, an extra semi-colon appears at the end of the sentence. In claim 13, by "FGT", applicant presumably means floating gate transistor since that is a term of art; however, since the term is not as in such widespread use as FET, applicant should clarify this point on the record, even if he chooses not to amend the claim language. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not clearly teach a controller associated with a plurality of distinct shift registers from a complete reading of the text in conjunction with the drawings. On the contrary, the controller is associated with stages. It appears as if in both claims 1 and 16, "stages" should be inserted after "two shift registers" on line 2 of claim 1 and after "shift registers" on lines 2 and 3 of claim 16, in order to be consistent with the disclosure taken as a whole.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejected claims are replete with instances in which a clear antecedent basis is lacking for terms. For example, in claims 2-15, 18 and 19, on line 1, "device" in claims 3 and 8 "said combinatorial logic", in claims 14 and 15, line 2, "said device", in claim 16, "said first shift register" and "said second shift register", in claims 16 and 17, "said corresponding shift register input terminal", in claims 17, "said first control line", "said shift register input", "said first input" and "said second" and in claim 18, "said first and second inputs".

The language of the last two paragraphs of claim 17 is so unclear that the subject matter which applicant regards as the invention has not been particularly pointed out therein.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 16 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kelem.

Referring to Figure 5 of Kelem a bi-directional shift register circuit is taught comprising a plurality of shift registers (in light of the specification, "shift registers" here is being interpreted as "shift register stages", thus, the stages are 501-504) each having an input and an output terminal (D and Q), each stage comprising

a first input connected to a first shift register output terminal (the input of 520 receiving the output of 501) and a second input connected to a second shift register output terminal (the input of 520 connected to the output of 502);

means to apply a first and second control voltage wherein said first and second control voltage are different (530-533 receives UP and DOWN voltages which are different);

and a combinatorial circuit responsive to said first and second control voltages (510, 520, 521 and 511 comprise a combinatorial logic circuit which are responsive to

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the UP/DOWN control signals insofar as they are responsive to the outputs of 501-504 and the UP/DOWN control signals are determinative of those outputs). Assuming that DO of 501 is the "corresponding shift register input terminal", absent guidance from applicant as to what this terminal corresponds to, DO receives an indication of either the first or second shift register stage from 501 as recited in claim 16.

***Allowable Subject Matter***

Claims 2-15 and 17-19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret R Wambach whose telephone number is (571)272- 1756. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday 6am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Margaret R Wambach  
Primary Examiner  
Art Unit 2816

mrw